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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,482	10/24/2003	Erik H. Hoffer	MSI 307	1837

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EXAMINER

BANGACHON, WILLIAM L

ART UNIT	PAPER NUMBER
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2612

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/692,482

Applicant(s)

HOFFER ET AL.

Examiner

William L. Bangachon

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Examiner's Response

1. In response to the application filed 10/24/2003, the application has been examined. The Examiner has considered the presentation of claims in view of the disclosure and the present state of the prior art. It is the Examiner's position that claims 1 through 44 are unpatentable for the reasons set forth in this Office action:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2612

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 4, 8-1³~~4~~, 17, 19-20, 22-23, 26, 30-35, are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,615,247 {hereinafter 'Mills'}.

In claims 9 and 12, Mills teaches of a security device 46 (i.e. closure system), comprising:

a locking module (i.e. detector cables 24 and 25, electronic seal 30) configured to selectively prevent unpermitted access to an enclosure {col. 3, lines 18-27+; col. 4, lines 27-30+, lines 61-63+}; and

a memory module (i.e. Fig. 5, 56) coupled to the locking module as shown in Figure 3, and configured to store information (i.e. data regarding the status of the security device) corresponding to the enclosure described in col. 3, lines 55-57+.

In claim 10, the memory module is correlated to the locking module via a common identifier (i.e. password) {col. 4, lines 40-43, and lines 61-67+}.

In claim 11, the memory module 56 is correlated to the locking module via cables 24 and 25 (i.e. physical coupling) as shown in Figure 3.

In claim 13, the memory module 56 is permanently coupled to the locking module through cables 24 and 25 as shown in Figure 3.

In claim 17, the locking module includes a keying mechanism (i.e. using a password through the keypad) configured to selectively provide access to the enclosure {paragraph bridging cols. 4 and 5}.

In claim 19, the locking module includes a locking cable 24 and 25.

In claim 20, the locking module includes a locking seal (i.e. electronic seal 30).

In claim 22, the memory module includes a nonvolatile memory such that the password stored does not get erased when power to the memory module is taken out {col. 4, lines 40-43, and lines 61-67+}.

In claim 23, the memory module digitally stores information (i.e. data regarding the status of the security device) corresponding to the enclosure described in col. 3, lines 55-57+.

In claim 26, the memory module stores a locking signature (i.e. password) wherein the locking signature is included whenever the enclosure is authorized to unlock {col. 4, lines 40-43, and lines 61-67+}.

In claim 30, the enclosure is a freight container shown in Figures 1 and 2.

In claim 31, the memory module includes an interface (i.e. security detection wire 80) having a plurality of electrically conductive contact surfaces (i.e. surface of electronic seal 30) {col. 5, lines 12-26}.

In claim 32, the contact surfaces are concentrically arranged as shown in Figure 6A.

In claim 33, the memory module is configured to be selectively powered via the contact surfaces when the detector cables 24 and 25 are connected through the security seal 30 {col. 4, lines 27-30}.

In claim 34, the memory module includes clock (i.e. microcontroller clock 54) and data pins (i.e. wire connectors) as shown in Figure 5, and wherein the contact surfaces are electrically coupled to the clock and data pins as shown in Figure 6B.

In claim 35, the memory module 56 is configured to be selectively powered with a battery 52, via the clock and data pins as shown in Figure 5.

Claim 1, recites a method for practicing the closure system of claim 12, further comprising loading into the memory module information corresponding to an enclosure {col. 3, lines 32-34}.

Claims 4 and 8, recites a method for practicing the closure system of claim 26 and therefore rejected for the same reasons.

7. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,615,247 {Mills}.

In claims 36 and 37, although Mills does not disclose "a cap configured to cover the memory module, wherein the cap is secured to the locking module via a leash", such features are conventional in protecting exposed wires or any electric conducting material. Such exposed wires or electric conducting material poses a grave danger to a user in that a user may get electrocuted if the exposed wire or material is live. The exposed wires or electric conducting material may also damage the electronic circuit of where the exposed wires or electric conducting materials are attached. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include such covers as claimed in the system of Mills because it serves to protect a user and the electronic circuit from electrocution and damage.

8. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,615,247 {Mills} in view of US Patent 5,858,500 {hereinafter 'MacPherson'}.

In claim 15, although Mills does not disclose "the memory module 56 is glued to the locking module", these claim limitations would have been obvious in the system of Mills, as evidenced by MacPherson. MacPherson teaches of several methods for providing a tamper responsive enclosure 24 utilized to control operation of a door lock {MacPherson, col. 6, lines 30-32} comprising protecting information stored in memory module 14 {col. 4, lines 25-37} by gluing the memory module 14 to a base (i.e. locking

Art Unit: 2612

module) with a resilient polyurethane and completely encapsulating the memory module 56 {MacPherson, col. 5, lines 30-51+}. MacPherson teaches that these features are advantageous because it provides a tamper-resistant memory module 14 and provides a complete environment seal against damp, dust and the like {MacPherson, col. 5, lines 43-51}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include gluing the memory module of Mills to a locking module because, as taught by MacPherson, it provides a tamper-resistant memory module 14 and provides a complete environment seal against damp, dust and the like.

In claim 16, Mills does not disclose "the locking module defines a bore holding a potting material, and wherein the memory module is set in the potting material". MacPherson suggests that the use of a potting or moulding operation is advantageous because it allows the production of an enclosure 10 with smooth and consistent outer dimension {MacPherson, col. 6, and lines 15-21}. It would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include potting or moulding operation in the system of Mills because, as taught by MacPherson, it allows the production of an enclosure with smooth and consistent outer dimension.

9. Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,615,247 {Mills} in view of applicant's admitted prior art.

In claims 18 and 21, Mills does not disclose, "the locking module includes a locking bar" and "the locking module includes a padlock". Applicant teaches that such suitable locking modules, as claimed, are conventional in preventing access to an

Art Unit: 2612

enclosure {specification, [0011]}. It would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include such suitable locking modules for preventing access to the enclosure of Mills because such locking modules are readily available and simulates the same actions of the electronic seal 30.

10. Claims 2-3, 5-7, 14, 24-25, 27-29 and 38-44, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,615,247 {Mills} in view of US Patent 6,265,973 {hereinafter 'Brammal et al'}.

In claims 24-25 and 27-29, Mills does not disclose, "the memory module stores a manifest for the enclosure, the memory module stores a digital image of contents of the enclosure, the locking signature includes when the enclosure was unlocked, who unlocked the enclosure, and where the enclosure was unlocked". Brammal, in an analogous art, teaches of an electronic security seal comprising a programmable memory module 124 for storing such valuable information {Brammal, col. 7, lines 4-19+}. Brammal suggest that it is advantageous to include such information in valuable cargo containers that are shipped on a worldwide basis because such containers are subject to tampering and vandalism {Brammal, col. 1, and lines 26-40}. Brammal teaches that storing such information in a memory module of an electronic seal is within the skill of one of ordinary skill in the computer programming art {Brammal, col. 7, lines 19-22+}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to store such valuable information as claimed, in the

Art Unit: 2612

memory module of Mills because this information serves to indicate whether the enclosure has been vandalized or tampered with.

Claims 2-3 and 5-7 recites a method for practicing the system of claim 24-25 and 27-29 and therefore rejected for the same reasons.

Claim 38 recites the limitations of claim 22. Although Mills does not disclose installing a circuit board with a nonvolatile memory inside a bore (i.e. instead of a rectangular control box 34), such aesthetic design changes as claimed, do not carry patentable weight. See MPEP 2144.04. Further, these claimed features are conventional, as evidenced by Brammal {Brammal, Figures 1-2 and 4-7}. Brammal suggests that it is advantageous to include programmable tagging circuits in conventional mechanical locking seals with a bore (i.e. bolt seals) because of the need to resolve a long felt problem in the cargo shipping field {Brammal, col. 2, line 64-col. 3, line 11}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to install circuit of Mills in a conventional mechanical locking seal with a bore (instead of a rectangular control box) because of the need to resolve a long felt problem in the cargo shipping field.

Claim 14 recites the memory module 56 is embedded in the locking module of claim 38 and therefore rejected for the same reasons.

Claim 39 recites the limitations of claim 32 and therefore rejected for the same reasons.

Claim 40 recites the limitations of claim 33 and therefore rejected for the same reasons.

Claim 41 recites the limitations of claim 34 and therefore rejected for the same reasons.

Claim 42 recites the limitations of claim 35 and therefore rejected for the same reasons.

Claim 43 recites the limitations of claim 16 and therefore rejected for the same reasons.

Claim 44 recites the limitations of claim 36 and therefore rejected for the same reasons.

Office Contact Information

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to William Bangachon whose telephone number is **(571)-272-3065**. The Examiner can normally be reached from Monday through Friday, 8:30 AM – 4:30 PM.

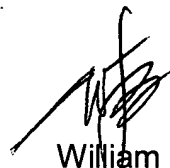
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy Garber can be reached on **(571)-272-7308**. The fax phone numbers for the organization where this application or proceeding is assigned is **571-273-8300** for regular and After Final formal communications. The Examiner's fax number is **(571)-273-3065** for informal communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2612


Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.



William L Bangachon
Examiner
Art Unit 2635

December 21, 2006



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